

PLANNING, SELECTING, STORING, PREPARING & SERVING FOOD TO MEET NUTRITIONAL NEEDS

Planning Meals Grade Levels: 7-12

Concept: Food Guide Pyramid

Comprehensive Standard: 6.3 Demonstrate planning, selecting, storing, preparing and serving of foods to meet nutritional needs of individuals and families across the life span

Technical Standard(s): 6.3.1. Apply various dietary guidelines in planning to meet nutrition and wellness needs

LESSON COMPETENCIES

- ? Identify the food groups and servings recommended in the Food Guide Pyramid
- ? Establish personal calorie/energy needs, fat and sugar needs based on the recommendations from the USDA in developing the Food Guide Pyramid
- ? Plan meals using the Food Guide Pyramid

Anticipated Behavioral Outcomes:

- ? Students follow the recommendations of the Food Guide Pyramid when making food choices.

Resources Needed:

- Food Guide Pyramid poster, brochures or printed reference (copies can be obtained from the Dairy Council of the Upper Midwest and a variety of other sources)
- Food models or pictures of a variety of food products, laminated if possible
- 2-4 large brown paper grocery bags
- Old magazines, food ads from newspapers
- Scissors
- Copies of blank food guide pyramids
- Copies of Rate Your Plate for all students (HS)
- Copies of How Does Your Diet Rate handouts for all students (HS)

References for teachers and students:

Download various brochures, including the Food Guide Pyramid for Young Children. In addition you can download “Using the Food Guide Pyramid: A Resource for Nutrition Educators” at this website: www.usda.gov/cnpp/pyramid2.htm

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A blank Food Guide Pyramid copy master is available from the Dairy Council of the Upper Midwest which can be printed and reproduced for classroom use. A downloadable blank Food Guide Pyramid is also available at the Dairy Council of California website www.dairycouncilofca.org/edu/edu_prog_mhfc2.htm

Pyramid Power Nutrition Adventures (1997-2001 Version 3) is a CD with interactive games and activities designed primarily for middle school students. It is available from the Oregon Dairy Council 10505 S.W. Barbur Blvd. Portland, OR 97219

The *Seven Ways To Size Up Your Servings* copy master is available from the Dairy Council of the Upper Midwest. In South Dakota, contact the Dairy Council, 619 5th Avenue, Brookings, SD 57006. Phone: 605-692-4812

Publication *How Much Are You Eating?* Related to portion and serving sizes is available for downloading at www.cnpp.usda.gov/Pubs/Brochures/index.htm

A Food Pyramid word search in a pyramid shape is available for free duplication at <http://teachfree.com/student/pyramidpower.htm>

Food Guide Pyramids from other cultures can be accessed at the Food and Nutrition Information Center of the USDA at www.nal.usda.gov/fnic/etext/000023.html. This site also includes links to other resources related to the Food Guide pyramid including an Activity Pyramid, and brochures on the Food Guide Pyramid from USDA.

A Food Guide which lists examples of today's food and traditional Northwest Indian foods is available at www.aaip.com/tradmed/tradmedfoodguide.html

Numerous links to Food Pyramid resources and teaching ideas can be accessed at www.lib.vt.edu/subjects/nutr/Nutrition.Central/pyramid.htm

Background Information:

The Food Guide Pyramid illustrates the research-based food guidance system developed by the USDA and the Department of Health and Human Services (HHS). It was designed to go beyond the Basic Four groups to help Americans implement the Dietary Guidelines (USDA).

The Food Guide Pyramid is based on USDA's research of what Americans eat, what nutrients are in these foods and how to make the best food choices for you. It is meant to be used as a general guide to assist Americans in choosing a healthy diet. The pyramid calls for eating a variety of foods to get the nutrients needed and at the same time, to get the right amount of calories to maintain a healthy weight.

The Food Guide Pyramid emphasizes foods from five food groups; the sixth group, at the tip of the pyramid, Fats, Oils & Sweets, is included but is meant to be included only sparingly as part of a healthy eating plan.

The Food Guide Pyramid shows a range of daily servings for each food group. The number of servings that is right for you depends on how many calories you need. Energy needs depend on your age, your gender, your size and how active you are.

In general, daily intake should be:

- ? 1,600 calories for most women and older adults
- ? 2,200 calories for kids, teen girls, active women and most men
- ? 2,800 calories for teen boys and active men

Those with lower energy/calorie needs should select the lower number of servings from each food group.

The USDA recommends the following Sample Diets for a day at the 3 Calorie Levels:

	Lower 1,600 calories	Moderate 2,200 calories	Higher 2,800 calories
Grain Group Servings	6	9	11
Vegetable Group	3	4	5
Fruit Group	2	3	4
Milk Group	2-3*	2-3 *	2-3*
Meat Group (ounces)	5	6	7
Total Fat (grams)	53 grams	73 grams	93 grams
Total Added Sugars (tsp)	6 tsp	12 tsp	18 tsp

* Women who are pregnant or breastfeed, teenagers and young adults to age 24 need 3 servings.

Learning Activities:

Middle School Level

- ? Using posters or pamphlets, introduce or review the Food Guide Pyramid with students. Discuss how to use the Food Guide Pyramid to make healthy food choices.
- ? Ask students to create a Pyramid Collage by locating and clipping pictures of food items from magazines or newspapers or use food models to make either an individual collage or a large classroom collage. (Adapted from Connecticut's Team Nutrition Program)
- ? Hold a Pyramid Relay by dividing students into teams. Student pull food items or pictures of food items from a bag. They must run across the room a designated distance to a Food Guide Pyramid on the floor or wall and tape the item to the correct place on the pyramid. They run back and tap the next person to go. First place goes to the team who placed the most items on the Food Guide Pyramid correctly. Review the correct placement of all items with students when the relay is finished. (Adapted from Connecticut's Team Nutrition Program)
- ? Play "Healthy Hopscotch". Set up a hopscotch board/outline and write a name of one food group in each square. A player throws a beanbag or other small marker onto a square. Before the player hops, he/she must name a food from that food group. The player continues from square to square, naming foods for the indicated food group until the course is completed. If an incorrect answer is given, the player gets a second chance.
- ? Ask students to create a "Favorite Fruit or Veggie" collage. Create a collage/poster with pictures and words representing a favorite food from the Food Guide Pyramid in the many forms that it is available in. For example, if the student's favorite is a tomato, pictures could include tomato soup, tomato juice, spaghetti sauce, ketchup, pizza, tacos, fresh tomato, etc.

- ? Ask students to write down all that they had to eat yesterday and approximate serving sizes. Use a blank Food Guide Pyramid; students put each food and amount in the appropriate space on the Food Guide Pyramid.

High School Level

- ? Complete the “Rate Your Plate” quiz found at the American Dietetic Association website www.eatright.org/pr/pressnnm98f.html
NOTE TO TEACHER: You will need to make copies of the quiz for your students as the quiz cannot be taken online. Use your discretion in regards to the question about alcoholic beverages.
- ? Students conduct an analysis of their food choices related to the Food Guide Pyramid by completing the *How Does Your Diet Rate?* activity.
- ? Students explore Food Guides from other cultures, comparing foods typically eaten and servings recommended.

Extended Learning Activities

- ? Students create skits to teach younger students about the Food Guide pyramid or the Five a Day program